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10/654,961	09/05/2003	Hirohito Suda	242215US90	7969
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			CASCA, FRED A	
ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER	
			2617	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/26/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)				
	10/654,961	SUDA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Fred A. Casca	2617				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply sis specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE	ely filed swill be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status	•					
1) Responsive to communication(s) filed on 28 No.	ovember 2006.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.	,				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims		<u>.</u>				
4) Claim(s) 9-18 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	n from consideration.	,				
5) Claim(s) is/are allowed.	••					
6)⊠ Claim(s) <u>9-18</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner		•				
10) ☐ -The drawing(s)-filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for foreign	priority under 25 H.S.C. & 110(e)	(d) or (f)				
a) All b) Some * c) None of:	priority under 35 0.5.C. § 119(a)	-(d)·Oi (i).				
1. ☐ Certified copies of the priority documents	have been received					
2. Certified copies of the priority documents		on No.				
3. Copies of the certified copies of the priori	* *					
application from the International Bureau	(PCT Rule 17.2(a)).	•				
* See the attached detailed Office action for a list of the certified copies not received.						
and the state of t	en e					
Attachment(s)	_					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		atent Application (PTO-152)				
Paper No(s)/Mail Date <u>10/13/06</u> .	6) Other:					

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## **DETAILED ACTION**

1. This action is in response to applicant's amendment filed on November 28, 2008. Claims 9-18 are still pending in the present application. This Action is made FINAL.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary-skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pombo et al., U.S. Patent No. 5,799,256, in view of Sato (U.S. Patent No. 5,953,677).

Referring to claim 9, Pombo discloses a mobile terminal (Abstract, FIG. 1, and col. 2, lines-52-67, "a-portable communication device (104)") comprising a transmitter/receiver configured to transmit/receive a signal to/from a base station (FIG. 1, and col. 3, line 39-67, "a tunable receiver 108", "transmitter 110", "base station 102", "base station 102 sends an appropriate signal on a control channel for . . . the mobile station 104"), a reception state measurement unit configured to measure a reception state of the signal from the base station received by the transmitter/receiver (col. 5, lines 50-65, "If the signal strength of the control signal broadcast by the base station the mobile station 104 is locked to is below an acceptable level", note a reception state measurement unit inherently is provided and it measures the reception state (e.g., signal strength) of control signals from the base station), and a reception period controller configured to control a reception period for receiving a control signal transmitted from the base station by the transmitter/receiver, based on a reception state measurement result determined by the communication state determination unit (FIGS. 2-6, col. 4, lines 30-40, and col. 5, lines 50-65, "col. 6, lines 7-16, "controller 116", "After a predetermined time period, such as 1.5 seconds, the handset periodically changes from the sleep mode to an active mode by powering up the receiver 108 and associated circuitry . . . If the signal strength of

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the control-signal broadcast by the base station . . . is below an acceptable level . . . then every other time the mobile station wakes up", "There are three main processes which may be combined", "having a different periodicity", "a predetermined time period, such as 1.5 seconds", "the mobile station again powers up to search for a control channel", "low power mode", "continuous sleep mode", note that the period e.g., 1.5 seconds is the reception period that is changed based on signal strength of control signals transmitted by the base station, and if the signal strength is not as expected, the reception period is changed to every other time, e.g., every 3 second).

Furthermore, Pombo discloses three processes, which may be combined, that contribute in reducing power consumption by consequently providing controlling the reception period. Predicting user movements, as one of the three processes, provides user mobility information that is used in reducing time during which receiver must be powered up (col. 5, lines 12-65, and col. 7, lines 1-60, "mobility", "Predicting use location allows . . . to search . . . for . . . base stations in the locations . . . the mobile station can reduce the time during which the receiver 108 must be powered up").

Pombo does not specifically disclose a movement state measurement unit configured to measure a movement state of the mobile terminal, and a reception period controller configured to control a reception period based on movement state measurement result measured by the movement state measurement unit.

Sato discloses a movement state measurement unit configured to measure a movement-state of-the mobile terminal, and a reception period controller configured to control a reception period based on movement state measurement result measured by the movement state measurement unit (Abstract, figures 1-2, and col. 1, lines 20-38, 45-63, "detection circuit for detecting whether the mobile telephone apparatus is in a moving condition", "control circuit responsive to the judging circuit and the detection circuit for stopping supplying power to the radio communication circuit", "clock circuit for measuring a first interval of stopping supplying the power").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the terminal of Pombo by incorporating the teachings of Sato and consequently providing a movement state measurement unit configured to measure a movement state of the mobile terminal; and allowing the controller of Pombo to control a reception period for receiving a control signal transmitted from the base station by the transmitter/receiver, based on a reception state measurement result determined by the communication state determination unit and a movement state measurement result measured by the movement state measurement unit, motivation being for the purpose of providing a more robust and efficient mobile terminal where controlling reception period and/or reducing power consumption is based on two elements so the reception period and power consumption is controlled more accurately and efficiently.

Referring to claim 10, the combinations of Pombo/Sato disclose the mobile terminal of Claim 9, and further disclose a communication state determination unit configured to determine whether the transmitter/receiver is in communication or stand-by, as a communication state wherein, the reception period controller controls the reception period based on the reception state measurement result, the movement state measurement result, and a communication state determination result determined by the communication state determination unit (Pombo, col. 5, line 24 through col. 6, line 43 "Predicting when the user needs to communicate allows . . . to enter-a-very-low-power mode or continuous sleep mode . . . in distinction to the-sleep mode, the mobile terminal 104 does not wake up periodically (for example, every few seconds)", "for extended period of time", note that predicting when the user needs to communicate inherently allows determining the communication state of the mobile station. Further note that as a result of determining the communications state the power mode of the mobile device is determined where sleep and continuous sleep modes are used. Further note that both these modes have different periodicities for receiving signals, e.g., every few seconds. Hence, the determining the communication state allows setting the periodicity of the reception of control signals).

Referring to claim 11, the combinations of Pombo/Sato disclose the mobile terminal of claim 9, and further disclose the reception state measurement unit measures a difference in reception states of signals from a plurality of base stations received by the transmitter/receiver, as the reception state (Pombo, col. 5, lines 24-42, "Predicting user location allows the mobile station . . . to only search for control channels broadcast by base stations in the locations", note

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that predicting user location inherently involves a plurality of base station in order to measure the signal strength from surrounding base stations so that the location of the mobile station is determined with reference to the base stations in the vicinity, hence, the reception state measurement unit measures a difference in reception states of signals from a plurality of base stations received by the transmitter/receiver, as the reception state).

Referring-to-claim 12, Pombo discloses a control device (Abstract, FIG. 1, and col. 2, lines 52-67, "a portable communication device (104)") comprising a reception state measurement unit configured to measure a reception state of the signal from a base station received by a mobile terminal (FIG. 1, col. 5, lines 50-65, col. 3, line 39-67, and col. 6, lines 7-17, col. 5, lines 50-65, "If the signal strength of the control signal broadcast by the base station the mobile station 104 is locked to is below an acceptable level", note a reception state measurement unit inherently is provided and it measures the reception state (e.g., signal strength) of control signals from the base station), and a reception period controller configured to control a reception period for receiving a control signal transmitted from the base station by the mobile terminal, based on a reception state measurement result determined by the reception state determination unit (FIGS. 2-6, col. 4, lines 30-40, and col. 5, lines 50-65, "col. 6, lines 7-16, "controller 116", "After a predetermined time period, such as 1.5 seconds, the handset periodically changes from the sleep mode to an active mode by powering up the receiver 108 and associated circuitry . . . If the signal strength of the control signal broadcast by the base station . . . is below an acceptable level . . .then every other time the mobile station wakes up", "There are three main processes which may be combined", "having a different periodicity", "a predetermined time period, such as 1.5 seconds", "the mobile station again powers up to search for a control channel", "low power mode", "continuous sleep mode", note that the predetermine time period e.g., 1.5 seconds is the reception period that is changed based on signal strength of control signals transmitted by the base station, and if the signal strength is not as expected, the reception period is changed to every other time, e.g., every 3 second).

Furthermore, Pombo discloses three processes, which may be combined, that contribute in reducing power consumption by consequently providing controlling the reception period. Predicting user movements, as one of the three processes, provides user mobility information

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that is used in reducing time during which receiver must be powered up (col. 5, lines 12-65, and col. 7, lines 1-60, "mobility", "Predicting use location allows . . . to search . . . for . . . base stations in the locations . . . the mobile station can reduce the time during which the receiver 108 must be powered up").

Pombo does not specifically disclose a movement state measurement unit configured to measure a movement state of the mobile terminal, and a reception period controller configured to control a reception period based on movement state measurement result measured by the movement state measurement unit.

Sato-discloses a movement state measurement unit configured to measure a movement state of the mobile terminal, and a reception period controller configured to control a reception period based on movement state measurement result measured by the movement state measurement unit (Abstract, figures 1-2, and col. 1, lines 20-38, 45-63, "detection circuit for detecting whether the mobile telephone apparatus is in a moving condition", "control circuit responsive to the judging circuit and the detection circuit for stopping supplying power to the radio communication circuit", "clock circuit for measuring a first interval of stopping supplying the power").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the control device of Pombo by incorporating the teachings of Sato and consequently providing a movement state measurement unit configured to measure a movement state of the mobile terminal; and allowing the controller of Pombo to control a reception period for receiving a control signal transmitted from the base station by the transmitter/receiver, based on a reception state measurement result determined by the communication state determination unit and a movement state measurement result measured by the movement state measurement unit, motivation being for the purpose of providing a more robust and efficient mobile terminal where controlling reception period and/or reducing power consumption is based on two elements so the reception period and power consumption is controlled more accurately and efficiently.

Referring to claim 13, the combinations of Pombo/Sato disclose the control device of claim 12, and further disclose a communication state determination unit configured to determine whether-the-transmitter/receiver is in a communication state or stand-by state, wherein the

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reception period controller controls the reception period based on the reception state measurement result, the movement state measurement result, and a communication state determination result determined by the communication state determination unit (col. 5, line 24 through col. 6, line 43 "Predicting when the user needs to communicate allows... to enter a very low-power-mode or continuous sleep mode... in distinction to the sleep mode, the mobile terminal 104 does not wake up periodically (for example, every few seconds)", "for extended period of time", note that predicting when the user needs to communicate inherently allows determining the communication state of the mobile station. Further note that as a result of determining the communications state the power mode of the mobile device is determined where sleep and continuous sleep modes are used. Further note that both these modes have different periodicities for receiving signals, e.g., every few seconds. Hence, the determining the communication state allows setting the periodicity of the reception of control signals).

Referring to claim 14, Pombo discloses a communication system comprising a base station (Abstract, col. 1, lines 20-31, FIG. 1, and col. 2, lines 52-67, "a base station 102") and a mobile terminal (col. 1, lines 20-31, col. 2, lines 52-67, and FIG. 1, "a portable communication device (104)") comprising a transmitter/receiver configured to transmit/receive a signal to/from the base station (FIG. 1, and col. 3, line 39-67, "a tunable receiver 108", "transmitter 110", "base station 102", "base station 102 sends an appropriate signal on a control channel for . . . the mobile station 104"), a reception state measurement unit configured to measure a reception state of the signal from the base station received by the transmitter/receiver (col. 5, lines 50-65, "If the signal strength of the control signal broadcast by the base station the mobile station 104 is locked to is below an acceptable level", note a reception state measurement unit inherently is provided and it measures the reception state (e.g., signal strength) of control signals from the base station), and a reception period controller configured to control a reception period for receiving a control signal-transmitted from the base station by the transmitter/receiver, based on a reception state measurement result determined by the reception state measurement unit (FIGS. 2-6, col. 4, lines 30-40, and col. 5, lines 50-65, "col. 6, lines 7-16, "controller 116", "After a predetermined time period, such as 1.5 seconds, the handset periodically changes from the sleep mode to an active mode by powering up the receiver 108 and associated circuitry . . . If the signal strength of the control signal broadcast by the base station . . . is below an acceptable level . . . then every other time the mobile station wakes up", "There are three main processes which may be combined", "having a different periodicity", "a predetermined time period, such as 1.5 seconds", "the mobile station again powers up to search for a control channel", "low power mode", "continuous sleep mode", note that the predetermine time period e.g., 1.5 seconds is the reception period that is changed based on signal strength of control signals transmitted by the base station, and if the signal strength is not as expected, the reception period is changed to every other time, e.g., every 3 second).

Furthermore, Pombo discloses three processes, which may be combined, that contribute in reducing power consumption by consequently providing controlling the reception period. Predicting user movements, as one of the three processes, provides user mobility information that is used in reducing time during which receiver must be powered up (col. 5, lines 12-65, and col. 7, lines 1-60, "mobility", "Predicting use location allows . . . to search . . . for . . . base stations in the locations . . . the mobile station can reduce the time during which the receiver 108 must be powered up").

Pombo does not specifically disclose a movement state measurement unit configured to measure a movement state of the mobile terminal, and a reception period controller configured to control a reception period based on movement state measurement result measured by the movement state measurement unit.

Sato discloses a movement state measurement unit configured to measure a movement state of the mobile terminal, and a reception period controller configured to control a reception period based on movement state measurement result measured by the movement state-measurement-unit (Abstract, figures 1-2, and col. 1, lines 20-38, 45-63, "detection circuit for detecting whether the mobile telephone apparatus is in a moving condition", "control circuit responsive to the judging circuit and the detection circuit for stopping supplying power to the radio communication circuit", "clock circuit for measuring a first interval of stopping supplying the power").

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It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the communication system of Pombo by incorporating the teachings of Sato and consequently providing a movement state measurement unit configured to measure a movement state of the mobile terminal; and allowing the controller of Pombo to control a reception period for receiving a control signal transmitted from the base station by the transmitter/receiver, based on a reception state measurement result determined by the communication state determination unit and a movement state measurement result measured by the movement state measurement unit, motivation being for the purpose of providing a more robust and efficient mobile terminal where controlling reception period and/or reducing power consumption is based on two elements so the reception period and power consumption is controlled more accurately and efficiently.

Referring to claim 15, Pombo discloses a communication method (Abstract, "A method and apparatus reduces power consumption in a portable communication device"), comprising receiving a signal from a base station (FIG. 1, and col. 3, line 39-67, "a tunable receiver 108", "transmitter 110", "base station 102", "base station 102 sends an appropriate signal on a control channel for . . . the mobile station 104"); measuring a reception state of the signal from the base station (col. 5, lines 50-65, "If the signal strength of the control signal broadcast by the base station the mobile station 104 is locked to is below an acceptable level", note a reception state measurement unit inherently is provided and it measures the reception state (e.g., signal strength) of control signals from the base station), and controlling a reception period for receiving a control signal transmitted from the base station by the mobile terminal, based on a reception state measurement result (FIGS. 2-6, col. 4, lines 30-40, and col. 5, lines 50-65, "col. 6, lines 7-16, "controller 116", "After a predetermined time period, such as 1.5 seconds, the handset periodically changes from the sleep mode to an active mode by powering up the receiver 108 and associated circuitry . . . If the signal strength of the control signal broadcast by the base station . . . is below an acceptable level . . . then every other time the mobile station wakes up", "There are three main processes which may be combined", "having a different periodicity", "a predetermined time period, such as 1.5 seconds", "the mobile station again powers up to search for a control channel", "low power mode", "continuous sleep mode", note that the predetermine

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time-period-e.g., 1.5 seconds is the reception period that is changed based on signal strength of control signals transmitted by the base station, and if the signal strength is not as expected, the reception period is changed to every other time, e.g., every 3 second).

Furthermore, Pombo discloses three processes, which may be combined, that contribute in reducing power consumption by consequently providing controlling the reception period. Predicting user movements, as one of the three processes, provides user mobility information that is used in reducing time during which receiver must be powered up (col. 5, lines 12-65, and col. 7, lines 1-60, "mobility", "Predicting use location allows . . . to search . . . for . . . base stations in the locations . . . the mobile station can reduce the time during which the receiver 108 must be powered up").

Pombo does not specifically disclose measuring a movement state of the mobile terminal and controlling a reception period based on movement state measurement result.

Sato discloses measuring a movement state of the mobile terminal and controlling a reception period based on movement state measurement result (Abstract, figures 1-2, and col. 1, lines 20-38, 45-63, "detection circuit for detecting whether the mobile telephone apparatus is in a moving condition", "control circuit responsive to the judging circuit and the detection circuit for stopping supplying power to the radio communication circuit", "clock circuit for measuring a first interval of stopping supplying the power").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the terminal of Pombo by incorporating the teachings of Sato and consequently providing a movement state measurement unit configured to measure a movement state of the mobile terminal; and allowing the controller of Pombo to control a reception period for receiving a control signal transmitted from the base station by the transmitter/receiver, based on a reception state-measurement result determined by the communication state determination unit and a movement state measurement result measured by the movement state measurement unit, motivation being for the purpose of providing a more robust and efficient mobile terminal

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where controlling reception period and/or reducing power consumption is based on two elements so the reception period and power consumption is controlled more accurately and efficiently.

Referring to claim 16, the combinations of Pombo/Sato disclose the mobile terminal of claim 9, and further disclose reception state comprises one of a reception power, a signal to interference power ratio, a carrier to interference power ratio, and a signal to noise ratio of the signal (Pombo, col. 4, lines 30-40, and col. 5, lines 50-65, "col. 6, lines 7-16, "controller 116", "signal strength").

Referring to claim 17, the combinations of Pombo/Sato disclose the mobile terminal of claim 9, and further disclose the movement state is one of a stationary state and an in motion state (Sato, please see the rejection of claim 9).

Referring to claim 18, the combinations of Pombo/Sato disclose the mobile terminal of claim 17, and inherently disclose the in motion state is one of an in high-speed motion, an in medium-speed motion, and an in low-speed motion (Sato, see rejection of claim 9. Note that when an object is in motion, the object is inherently in one of a high-speed motion, an in medium-speed motion, and an in low-speed motion).

## Response to Arguments

4. Applicant's arguments, filed on November 28, 2006, with respect to the rejection(s) of claim(s) 9-15 have been fully considered but are not persuasive.

In response to applicant's arguments that "Pombo does not disclose or suggest a reception period controller configured to control the reception period based on a reception state measurement result", the examiner respectfully disagrees and submits that Pombo's reception period controller reads clearly on features of the reception period controller that the applicant relies upon in independent claim 9. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See in re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Pombo's reception period (e.g., 1.5 second) is at least one interpretation of the applicant's reception period. Note that this reception period is varied based on (e.g., signal strength). Thus, there is inherently a controller and control logic program to implement such varying of reception

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control (Pombo, FIGS. 2-6, col. 4, lines 30-40, and col. 5, lines 50-65, "col. 6, lines 7-16, "controller 116", "After a predetermined time period, such as 1.5 seconds, the handset periodically-changes from the sleep mode to an active mode by powering up the receiver 108 and associated circuitry... If the signal strength of the control signal broadcast by the base station... is below an acceptable level... then every other time the mobile station wakes up", "There are three main processes which may be combined", "having a different periodicity", "a predetermined time period, such as 1.5 seconds", "the mobile station again powers up to search for a control channel", "low power mode", "continuous sleep mode", note that the 1.5 seconds is the reception period that is changed based on signal strength of control signals transmitted by the base station, and if the signal strength is not as expected, the reception period is changed to every other time, e.g., every 3 second).

Additionally Sato's teachings also read on the reception period controller of applicant's claim 9 (Sato, Abstract, figures 1-2, and col. 1, lines 20-38, 45-63, "detection circuit for detecting whether the mobile telephone apparatus is in a moving condition", "control circuit responsive to the judging circuit and the detection circuit for stopping supplying power to the radio communication circuit", "clock circuit for measuring a first interval of stopping supplying the power", note that the judging circuit and the detection circuit stops supplying power to the radio communication circuit, thus making the radio communication circuit inactive for a certain period of time, where this period of time that the circuit is inactive is a "reception period" as the reception period claimed by applicant, where during Sato's reception period communication is not processed actively).

## Conclusion

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached on (571) 272-7922. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CHARLES APPIAH